Comment No. 2

Specification Subcommittee: _____
Engineering Policy Comm: _____
Team Leader: _____

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Submitted by
(Date)

Team Members and Resources			
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(Rationale: There are not many changes made to this specification. It was felt that the limited amount of methodology that was or is written into the spec should remain overall and intact as a service to either MoDOT inspectors or the contractors doing the work. It is believed the amount of methodology is minimal and irreducible in terms of eliminating lines without adversely affecting the desired result we expect to get in the field. The method of measurement and basis of payment were not changed. The contractor we had on our team felt these were essential for them. Please see the Summary for more detail.
Key Words: Epoxy, Epoxy Coated, Reinforcing Steel, Steel, Coatings)

SECTION 710

EPOXY COATED REINFORCING STEEL

710.1 Description. [1]This work shall consist of furnishing and placing epoxy coated reinforcing steel of the shape, size and grade specified, ~~and shall conform to~~ Section 706 except as modified herein.

~~be~~ in accordance with

710.2 Material.

be in accordance with

710.2.1 [2]All material shall ~~conform to~~ Division 1000 Materials Details, and specifically as follows:

Item	Section
Epoxy Coated Reinforcing Steel	1036.3

710.2.2 [3]Epoxy coated reinforcing steel shall not be flame-cut.

710.3 Construction Requirements.

710.3.1 Handling. [4]All systems for handling epoxy coated bars shall have padded contact areas. [5]If, in the judgment of the engineer, the coating is damaged to the extent that the coating can no longer provide the intended protection and can not be satisfactorily patched, the material shall be returned to the coating applicator for repair or shall be replaced.

metal (best)

710.3.2 Placement.

710.3.2.1 [6]Epoxy coated bars shall be placed on ~~wire~~ supports coated with plastic or epoxy or on plastic bar supports, and shall be held in place by use of plastic coated tie wires or molded plastic clips. [7]Plastic bar supports shall meet or exceed the load carrying capacity of, and use the same spacing as, metal bar supports, and shall be molded in a configuration that does not restrict concrete flow and consolidation around and under the bar support. [8]When placing epoxy coated bars, ~~they~~ the bars shall be prevented from coming into contact with other steel items such as drains and shear connectors.

710.3.2. 32 [9]The contractor shall exercise caution when placing and vibrating concrete to prevent ~~any~~ damage to the epoxy coating. [10]The vibrator head shall be equipped with a ~~rubber~~ tip made from rubber or other resilient material and shall be a maximum diameter of 2 1/2 inches (65 mm). [11]In order to prevent the vibrator from damaging the coated bars the head shall be covered with a sheet of rubber or ~~similar~~other resilient material as approved by the engineer.

710.3.2.32 [12]After the reinforcing bars are secured to approved bar supports a final visual inspection will be made and all uncoated or damaged areas shall be coated or repaired as required by the engineer.

in accordance with Sec 710.3.3

~~**710.3.2.3** The contractor shall exercise caution when placing and vibrating concrete to prevent any damage to the epoxy coating. The vibrator head shall be equipped with a rubber tip and shall be a maximum diameter of 2 1/2 inches (65 mm). In order to prevent the vibrator from damaging the coated bars the head shall be covered with a sheet of rubber or a similar material as approved by the engineer.~~

710.3.3 Repairing Bars. [13]If the epoxy coating is damaged, patching will be required. [14]All damaged areas shall be patched with the material specified in Sec 1036.3.1.5* and in accordance with the manufacturer's ~~instructions~~ recommendations. [15]Patching will be required on all sheared or cut ends of bars, end areas left bare during the coating process, and any areas where the entire coating is removed. [16]All repairs shall be completed as soon as practicable and in the case of bare end areas and sheared ends, before visible oxidation of the surface occurs.

** Note: The exact location of this sub-section must be checked when Sect. 1036 is finalized.*

710 & gES

710.3.4 Method of Measurement. [17]Measurement will be made to the nearest 10 pounds (5 kg) for each structure. [18]The weight (mass) paid for shall be the theoretical weight (mass) of ~~plain~~ bars, and no allowance will be made for the clips, wire, supports and spacers or other fastening devices for holding the reinforcement in place. [19]Allowance will not be made for an overrun in scale weights (masses) of bars. [20]Final measurement will not be made except for authorized changes during construction or where appreciable errors are found in the contract quantity. [21]The revision or correction will be computed and added to or deducted from the contract quantity.

will

plan - same as in Sec 706 gES.

epoxy coated gES.

710.5 gES

710.3.5 Basis of Payment. [22]The accepted quantity of epoxy coated reinforcing steel, complete in place, will be paid for at the contract unit price which shall include furnishing all material, cleaning, coating, equipment, tools, labor and any work incidental thereto. [23]No separate payment will be made for patching material nor for any required repair of the coating.

Could we replace the bracketed part with, "Payment will be considered full compensation for all labor, equipment and material to complete the described work."